Tables

Table 1. Soil tilling results from the soil tilling pilot test.

Sample Location Sample Depth (feet bgs) Sample Date	Soil Direct Contact for Child Resident[1] (µg/kg)	Site-Specific Leaching Cleanup Levels (µg/kg)	Baseline		Post-Tilling	
			SBS-7D 0-2 8/11/2015	SS-88D 0-2 8/11/2015	SBS-7D 0-2 8/13/2015	SS-88D 0-2 8/13/2015
COCs (µg/kg)						
Tetrachloroethene	112,000	130	< 11.0	< 10.6	**46.7 J**	< 11.4
Trichloroethene	5,700	100	< 12.9	< 12.4	< 13.3	< 13.3

Table 2. Groundwater PCE concentrations (µg/L) in all monitoring wells before (1992-2000) and during and after Interim Remedial Activities (2001-2018).

Well Number	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
MW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.40	<0.20	<0.20	<0.20	<1.0	<1.0	<1.0	<0.10	<1.0	<1.0	<0.19	<0.13	<0.25	<0.17
MW-3	1,000	1,600	564	381	726	910	845	314	180	173	200	223	195	48.3	165	117	85.6	<1.0	37	260	30	93	35.2	67.4.	6.4	4.7	16.6
MW-4	<1.0	NA	NA	NA	NA	NA	31	12	<6.8	2.6	14	2.86	10.4	0.67	12.2	0.38	13.6	4.1	3.9	2.6	5.3	2	4.7	1.4	<0.13	1.1	0.47J
MW-5	17	15	26	18	22	29	43	18	<9.9	17	15	26	5.59	3.63	4.47	2.59	2.79	1.2	2.4	3	0.83	1.4	2.7	1	<0.13	0.75J	0.44J
MW-9	96	NA	NA	NA	NA	50	87	39	<12	6.4	8.8	6.07	16.1	3.91	15.1	10.6	5.45	2.6	2.4	8.6	1.5	0.67	3.1	5.2	0.90J	1.1	0.73J
MW-12	NA	NA	NA	NA	NA	NA	1.8	1.2	<1.0	1.2	<1.0	<1.0	0.800J	0.330J	1.01	0.39	0.21	0.19	<1.0	0.7	<0.10	0.51J	1.1	0.24J	<0.13	0.80J	<0.17
MW-14	29	17	19	18	14	NA	NA	NA	NA	NA	NA	NA	1.7	2.04	3.25	1.98	1.35	0.43	1.1	2.7	1.5	0.67J	1.3	1.8	1.0	0.85J	<0.17
MW-18	NA	NA	NA	NA	3.4	3.8	3.7	3.9	<2.4	2.1	2.3	1.36	1.13	1.01	0.85	0.94	0.89	<1.0	<1.0	0.39	<1.0	0.37J	1.1	0.39J	0.40J	0.83J	<0.17
MW-19	NA	NA	NA	<1.0	<1.0	NA	<1.0	0.5	<1.0	<1.0	<1.0	<1.0	0.36	0.29	0.27	0.3	0.31	<1.0	<1.0	0.23	<0.10	<1.0	<1.0	0.23J	<0.13	<0.25	<0.17

Notes:

The DEQ-7 standard for PCE is 5 µg/L

NA – not applicable

µg/L – microgram per liter

"<" – analyte not detected above the laboratory method detection limit (MDL); result is considered non-detect

"J" – the result was detected above the MDL and below the laboratory's reporting limit; result is considered an estimated value

Table 3. Groundwater TCE concentrations (µg/L) in all monitoring wells before (1992-2000) and after and during Interim Remedial Activities (2001-2018).

Well Number	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
MW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.40	<0.20	<0.20	<0.20	<1.0	<1.0	<1.0	<0.10	<0.40	<0.40	<0.14	<0.40 U	<0.052	<0.15
MW-3	1,400	1,500	631	314	660	750	344	138	81	62	66	38.4	23.2	7.34	11	9.86	8.23	<1.0	4.7	27	2.9	5.3	2.6	4.6	0.43	0.35J	1.3
MW-4	60	NA	NA	NA	NA	NA	26	19	12	4.9	9.8	2.57	4.24	2.51	2.19	2.4	2.49	1.2	1.2	0.7	1.1	0.71	0.96	0.6	0.75	0.48	0.43
MW-5	35	26	59	33	52	62	29	15	6.3	3.0	6.9	2.67	1.84	0.85	1.92	0.94	1.75	1.2	1.3	1.1	0.69	1.1	1.00	0.44	0.49	0.64	0.60
MW-9	200	NA	NA	NA	NA	89	75	38	16	4.7	8.9	5.44	5.21	2.36	5.56	3.24	2.08	1.6	1.1	2.8	0.65	1.1	0.77	1.5	0.26J	0.27J	0.46
MW-12	NA	NA	NA	NA	NA	NA	2.7	3	2.3	2.5	2.1	<1.0	1.33	0.79	1.05	0.55	0.36	1.3	1.0	0.8	<1.0	1.1	1.3	0.58	<0.051	0.77	0.66
MW-14	79	41	51	24	32	NA	NA	NA	NA	NA	NA	NA	1.01	1.0	1.6	0.89	0.59	0.54	0.47	1.1	0.48	0.26J	0.3	0.64	0.40	<0.052	0.27J
MW-18	NA	NA	NA	NA	5.6	5.6	5.0	4.5	2.9	2.2	2.5	1.54	0.940J	0.92	0.72	0.86	0.71	0.34	0.50	0.05	0.52	0.29J	0.49	0.44	0.5	0.29J	0.27J
MW-19	NA	NA	NA	2.2	1.5	NA	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	0.82	0.80	0.670J	0.76	0.77	0.64	0.081	0.39	0.59	0.46	0.27	0.57	0.62	0.4	0.6

Notes:

The DEQ-7 standard for TCE is 5 µg/L

NA – Not applicable

µg/L – microgram per liter

"<" – analyte not detected above the laboratory method detection limit (MDL); result is considered non-detect.

"U" – The result was qualified for a detection because of detections in blank QC samples.

Table 4. Remaining unacceptable risks at Mission Wye.

	Human Health						Environment		
	Residential (adult)	Residential (child)	Commercial/ industrial worker	Construction/ excavation worker	Utility worker	Trespasser	Groundwater	Surface soil	Subsurface soil
Surface soil particle inhalation	X	X	X	X	X	X			
Subsurface soil particle inhalation				X	X				
Incidental Ingestion of soil	X	X	X	X	X	X			
Soil vapor/indoor air	X	X	X	X	X				
Surface dermal contact	NA	NA	NA	NA	NA	NA			
Subsurface dermal contact				NA	NA				
Contact with contaminated groundwater	X	X	X	X	X		X		
Leaching potential								X	X

NA- Not applicable; Although this is an exposure pathway, the assumed dermal absorption is 0 percent based on the rapid volatilization of VOCs[1]

X	This pathway exists for the receptor.
X	An unacceptable risk exists for this pathway.
X	These risks were identified in the 2014 Risk Assessment Amendment. However, cleanup levels have been met during subsequent pilot test study and/or could be supported based on empirical data in monitoring wells downgradient from areas that have had samples exceed soil cleanup levels. Site-specific cleanup levels for residential direct contact (child) were met during the soil tilling pilot test in both pre- and post-tilling events and in other areas during confirmation sampling after interim actions; no unacceptable risk exists for these receptors. The leaching potential cleanup levels have been based on the same pre- and post-tilling results and empirical data demonstrated by decreasing trends in groundwater.

Table 5. Site-specific cleanup levels.

COC	Soil Direct Contact, mg/kg[1]					Soil vapor/vapor intrusion cleanup levels, µg/m^3				Leaching potential cleanup level[1,5], mg/kg	DEQ-7 groundwater standard[4], µg/L
	Commercial/Industrial Worker	Construction Worker	Adult Trespasser	Adult Residents	Child Resident	Utility Worker	Construction worker/excavator[2]	Residential indoor air[3]	Industrial indoor air[3]		
Tetrachloroethene (PCE)	557	739	4,077	134	112	1,460	353	47	235	0.13	5
Trichloroethene (TCE)	27	38	222	6.4	5.7	73	17	2.15	15	0.10	5

Acceptable cancer risk level is $1x10^{-5}$

Acceptable non-cancer level is 1.0

COC -Contaminant of concern

mg/kg - milligram per kilogram

µg/m^3 - microgram per cubic meter

µg/L - micrograms per liter

[1] Cleanup levels calculated in the Human Risk Assessment Amendment (AECOM, 2014b)

[2] Cleanup level calculated in the DEQ's Soil Vapor Risk Memorandum (DEQ, 2018b)

[3] Cleanup levels calculated in the Soil Vapor Monitoring and Vapor Intrusion Evaluation (AECOM, 2014a)

[4] Cleanup level calculated in Circular DEQ-7 Montana Numeric Water Quality Standards (DEQ, 2017)

[5] Leaching potential is only applicable to subsurface soils

Table 6. Summary of comparative analysis of alternatives.

Alternative number	Alternative	Protection of Human Health and the Environment	Compliance with ERCLs	Permanent Solutions	Treatment or Resource Recovery Techniques	Short-term Effectiveness	Implementability	NPV Cost (Cost Effectiveness)
1	No Further Action	No	No	No	No	No	Yes	$0
2	Soil Tilling	Yes, when combined with another alternative	Yes, when combined with another alternative	Yes	Yes	Yes, when combined with another alternative	Yes, only for surface soil and not for subsurface soil	$36,100
3	SVE System	Yes, when combined with another alternative	Yes, when combined with another alternative	Yes	Yes	Yes, when combined with another alternative	Yes	$167,100
4	Institutional controls	Yes, when combined with another alternative	Yes, when combined with another alternative	Yes, when combined with other alternatives and implemented adequately to ensure compliance	No	Yes	Yes	$63,500
5	Monitored Natural Attenuation	Yes, when combined with another alternative	Yes, when standards are met	Yes	Yes, when combined with another alternative	Yes, when combined with another alternative	Yes	$143,300

ERCLs – Environmental Requirements, Criteria Limitations

NPV – Net Present Value

Figures

Figure 1. Facility location map.

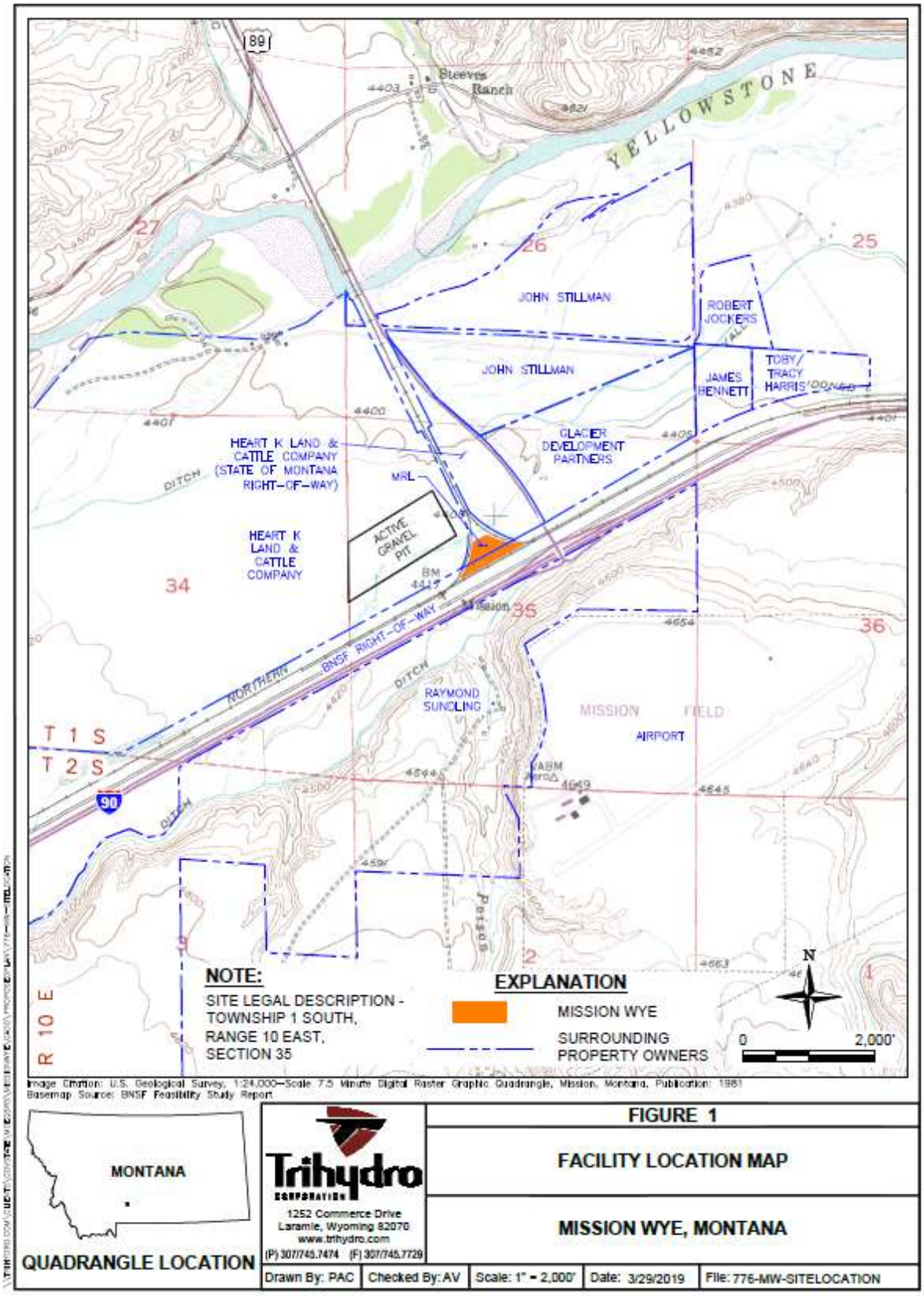


Figure 2. Property ownership and utility map.

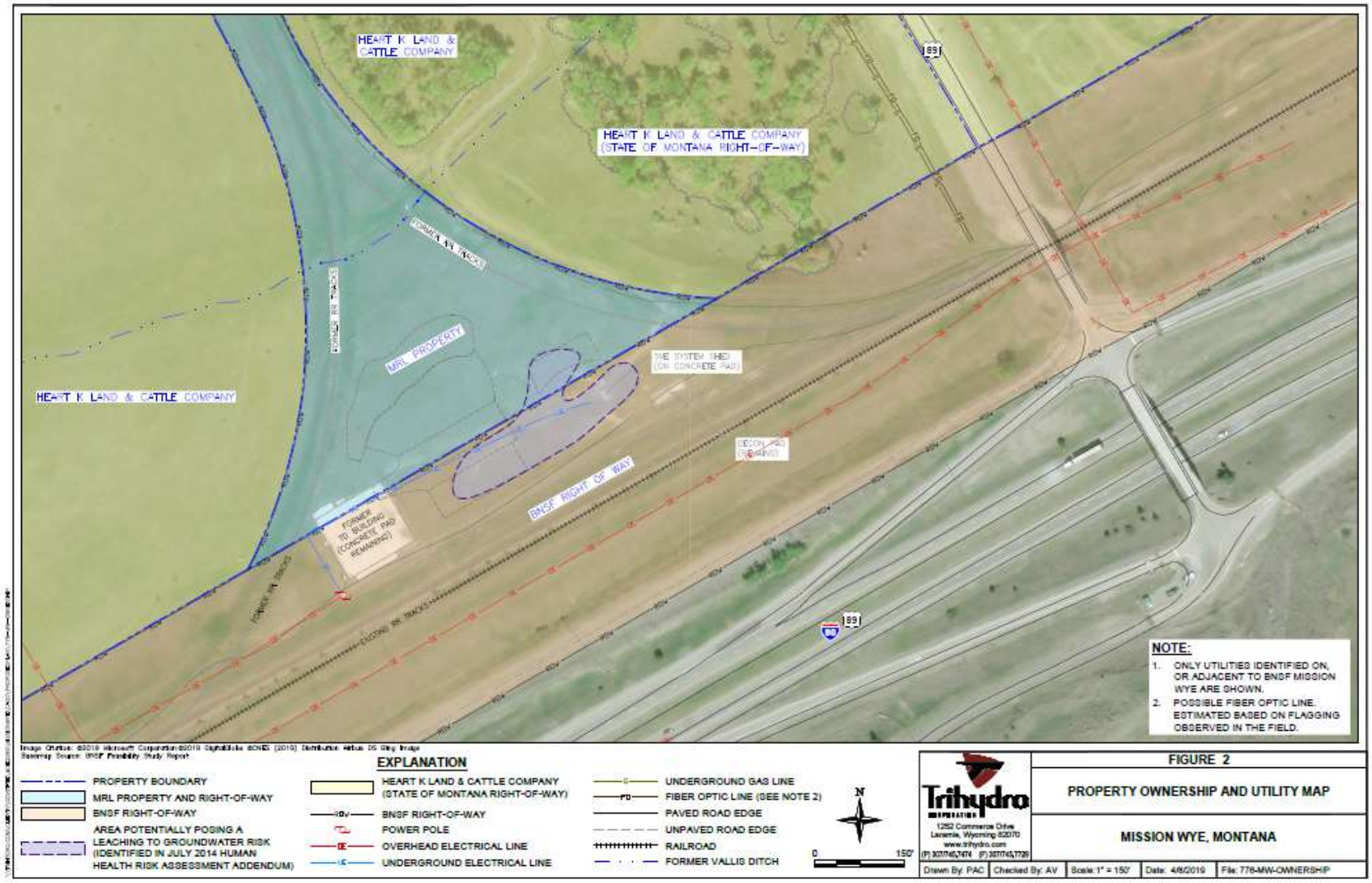


Figure 3. Locations of contaminant sources.

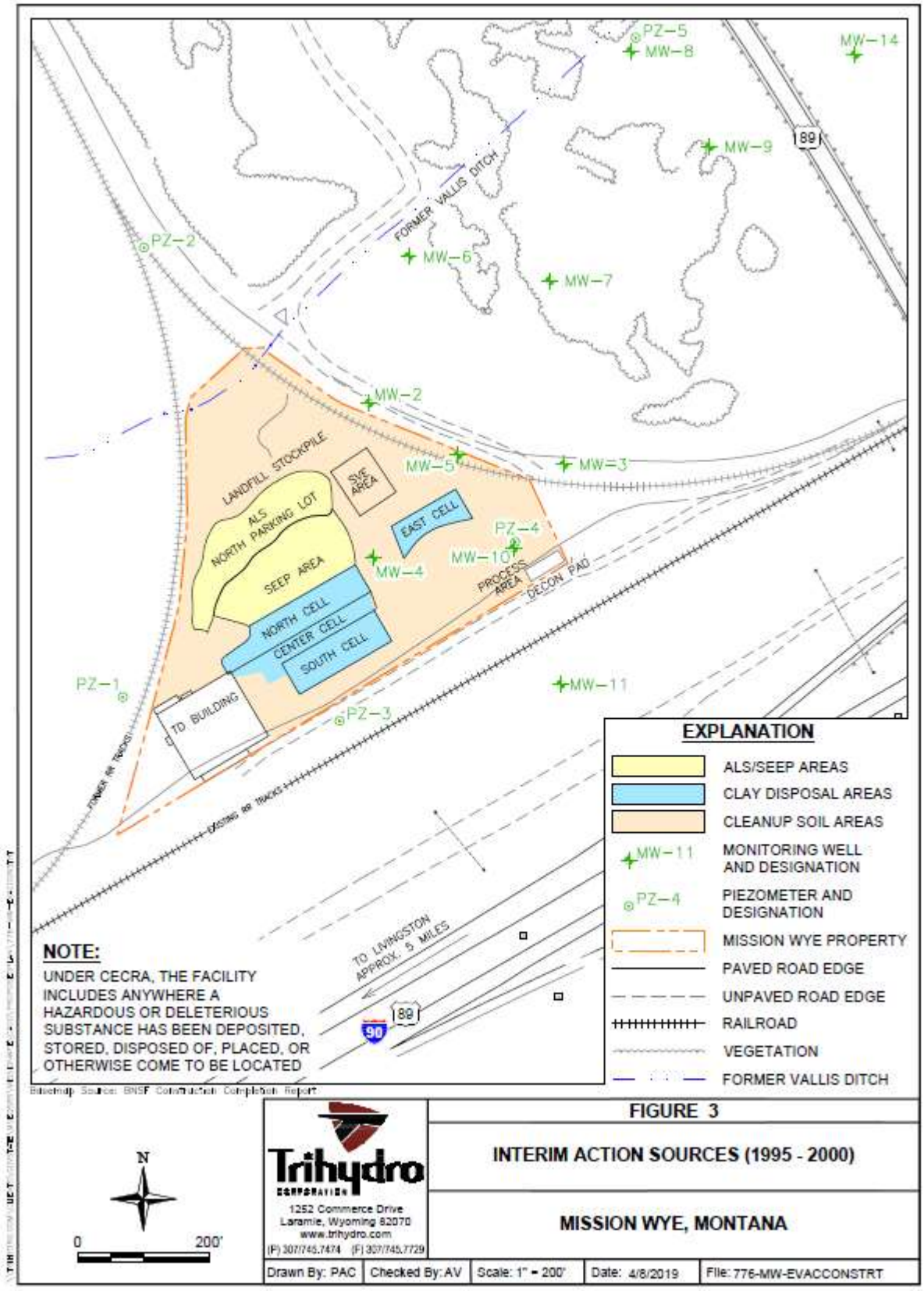


Figure 4. Soil sampling locations and identified exceedances of site-specific leaching potential cleanup levels.

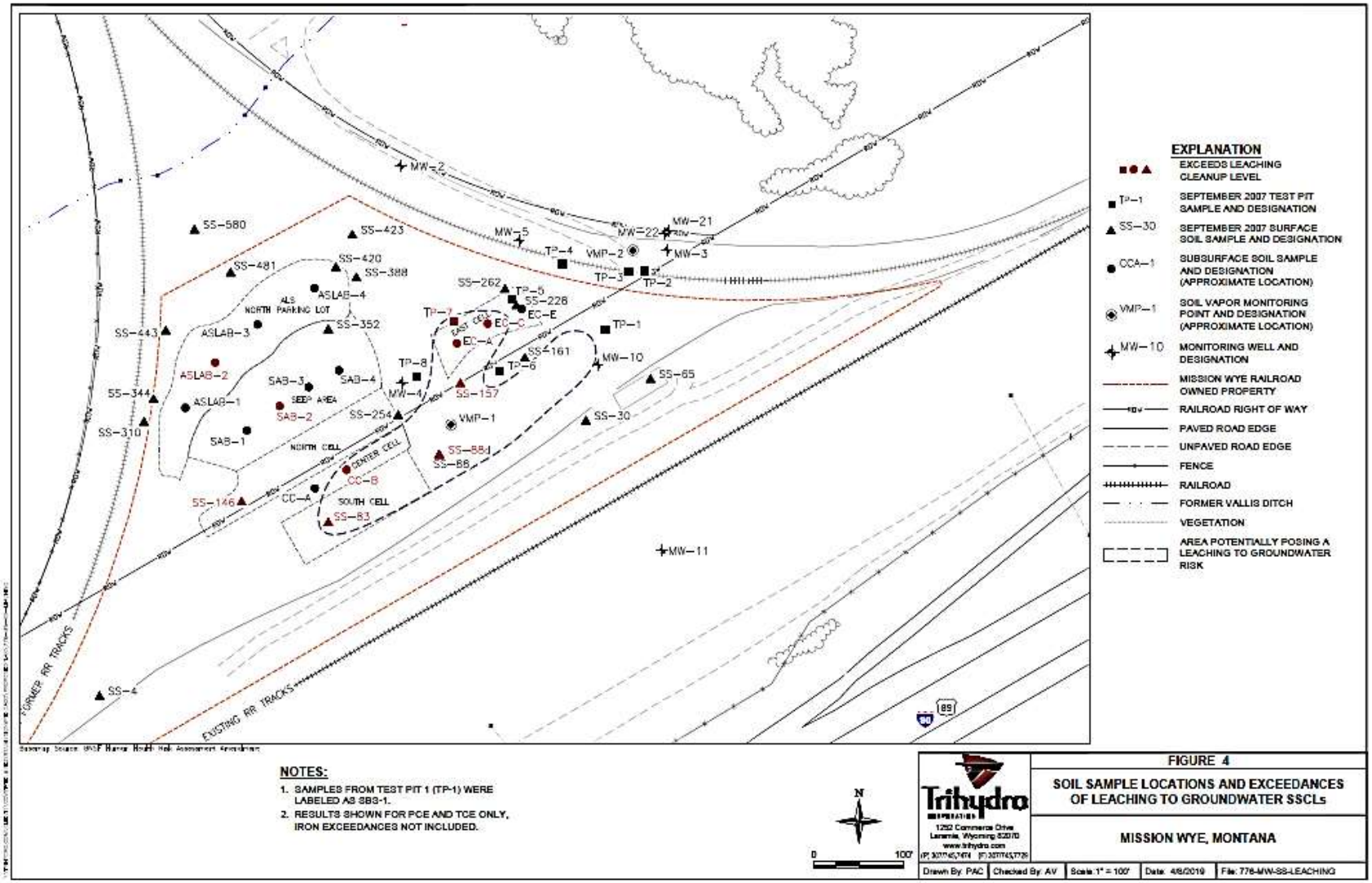


Figure 5. Soil tilling pilot test sample locations and results.

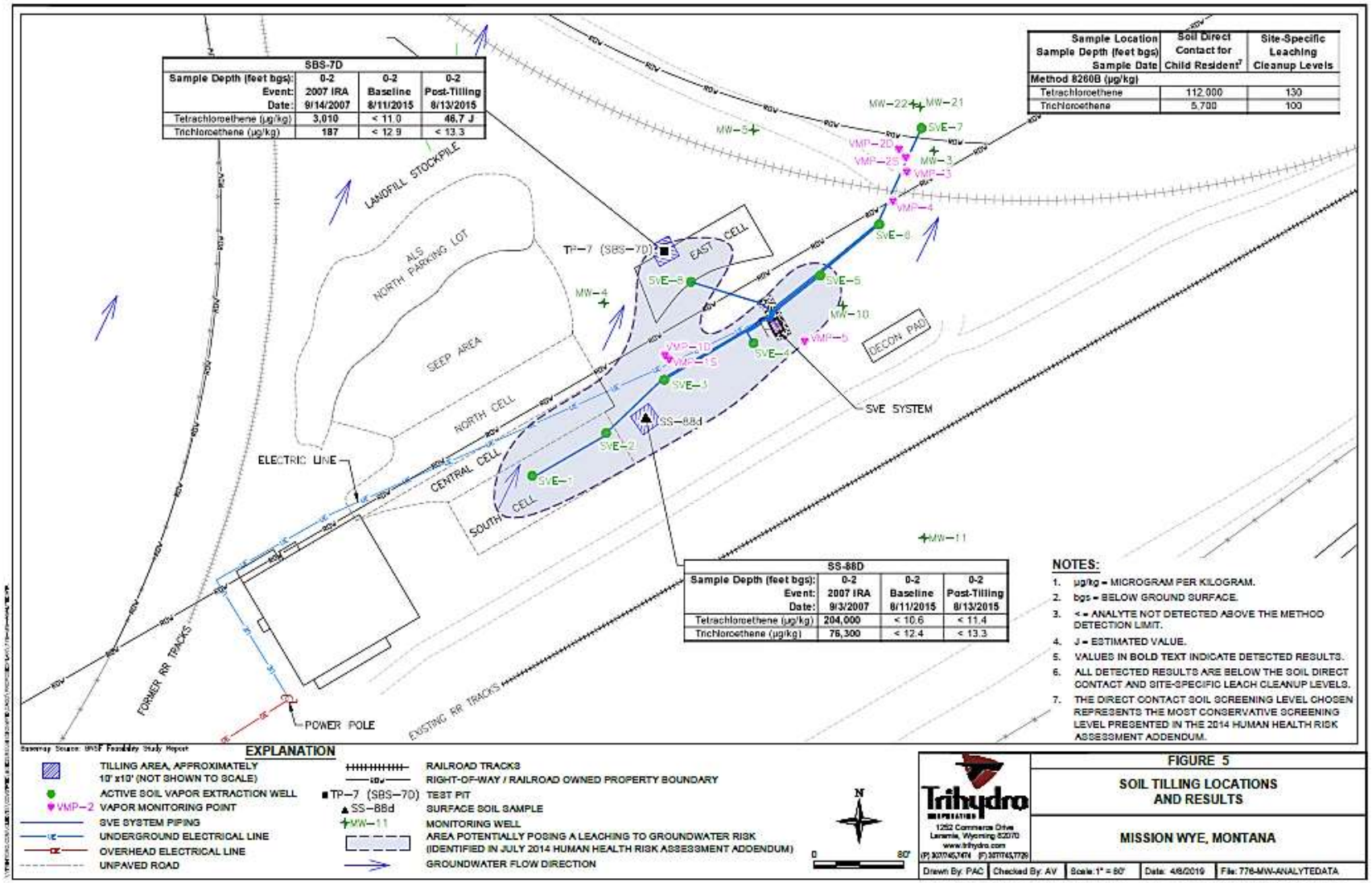


Figure 6. SVE well soil vapor results.

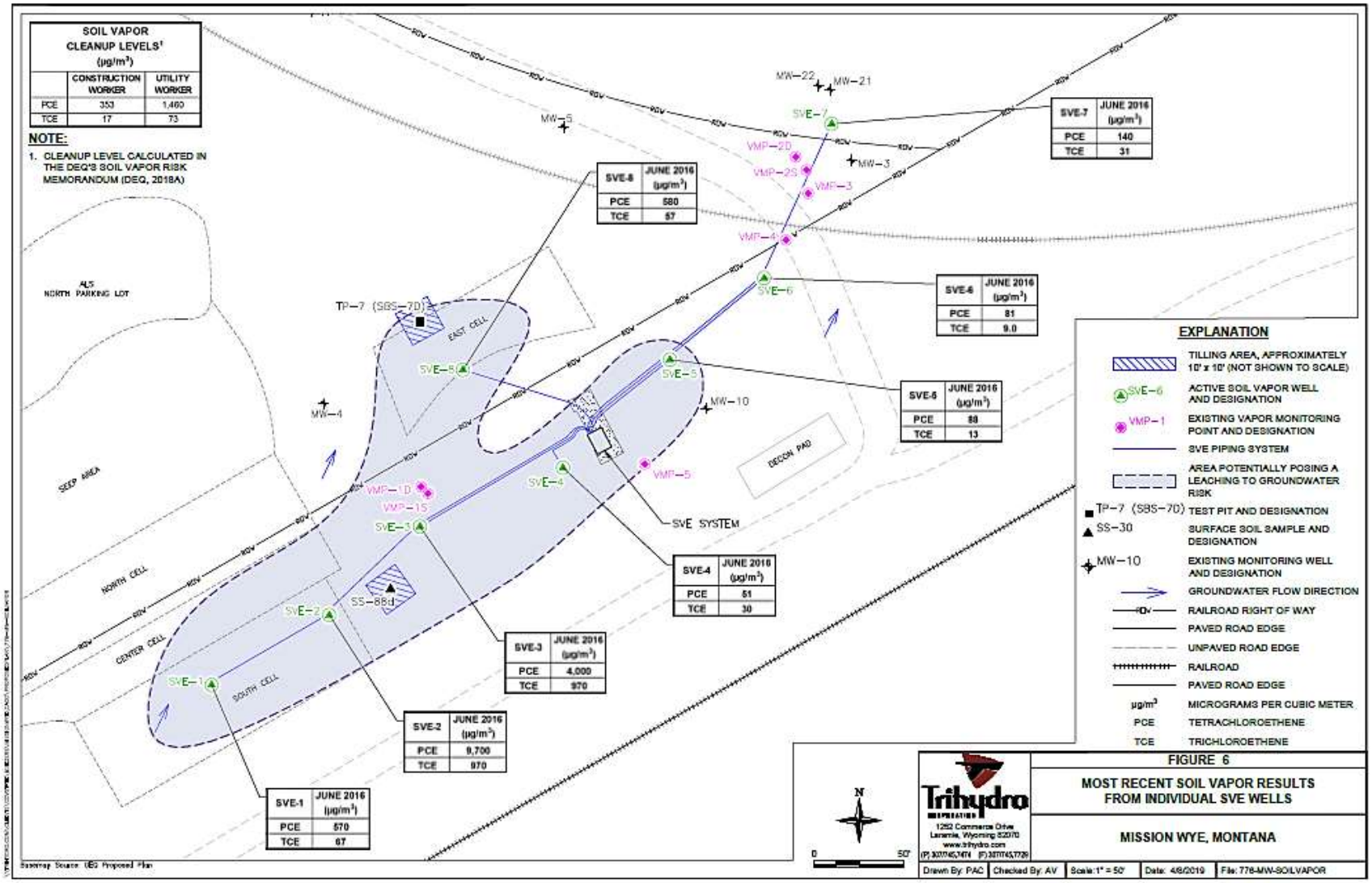
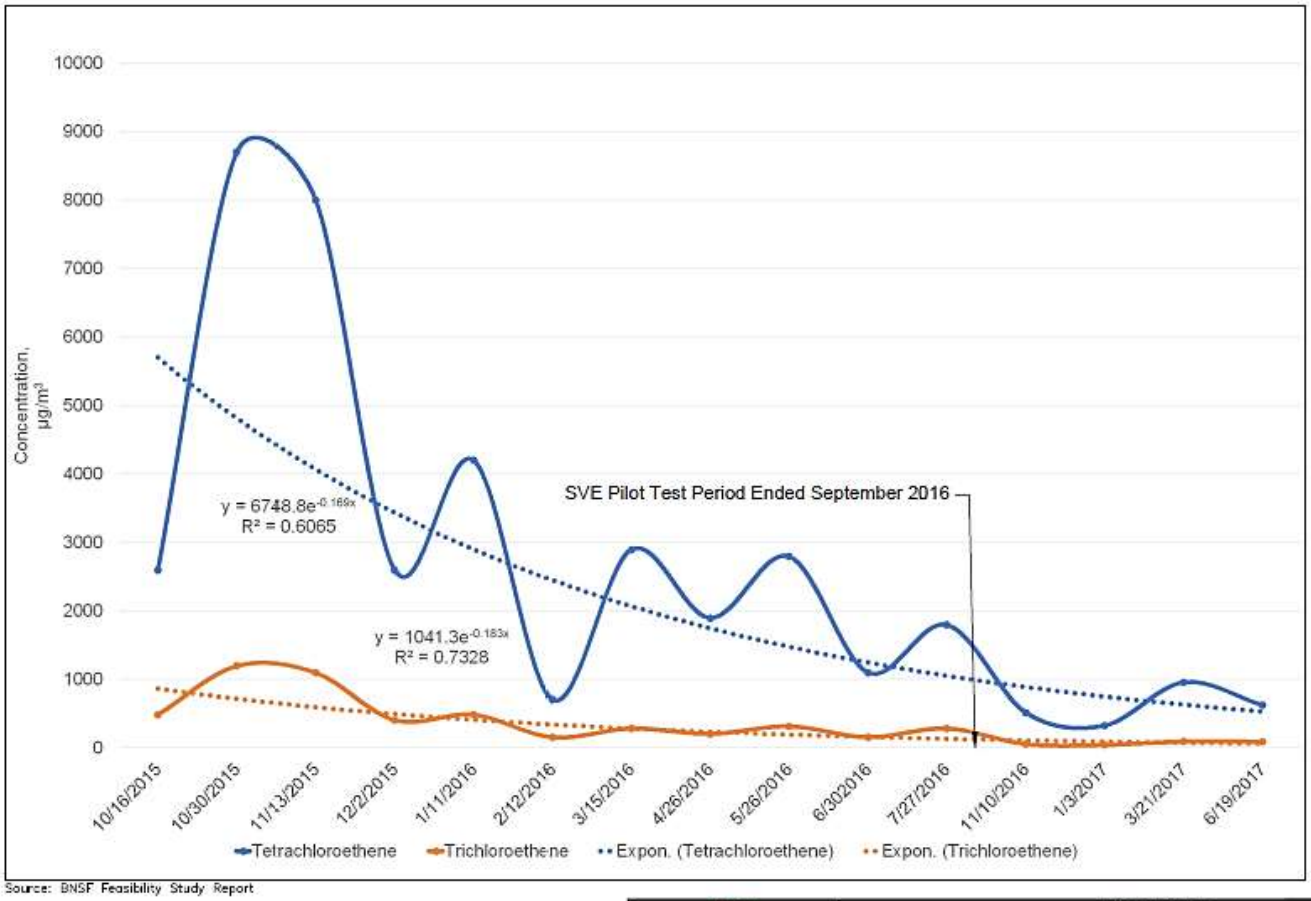


Figure 7. PCE and TCE combined vapor sample concentrations over time.



Source: BNSF Feasibility Study Report

Trihydro CORPORATION
1252 Commerce Drive
Laramie, Wyoming 82070
www.trihydro.com
(P) 307.745.7474 (F) 307.745.7729

FIGURE 7

PCE AND TCE COMBINED VAPOR SAMPLE CONCENTRATIONS OVER TIME

MISSION WYE, MONTANA

Drawn By: PAC	Checked By: AV	Scale: NONE	Date: 4/2/2019	File: 776-MW-PCE-TCE-CONC

Figure 8. Results of groundwater monitoring at MW-1, MW-3, MW-4, MW-5.

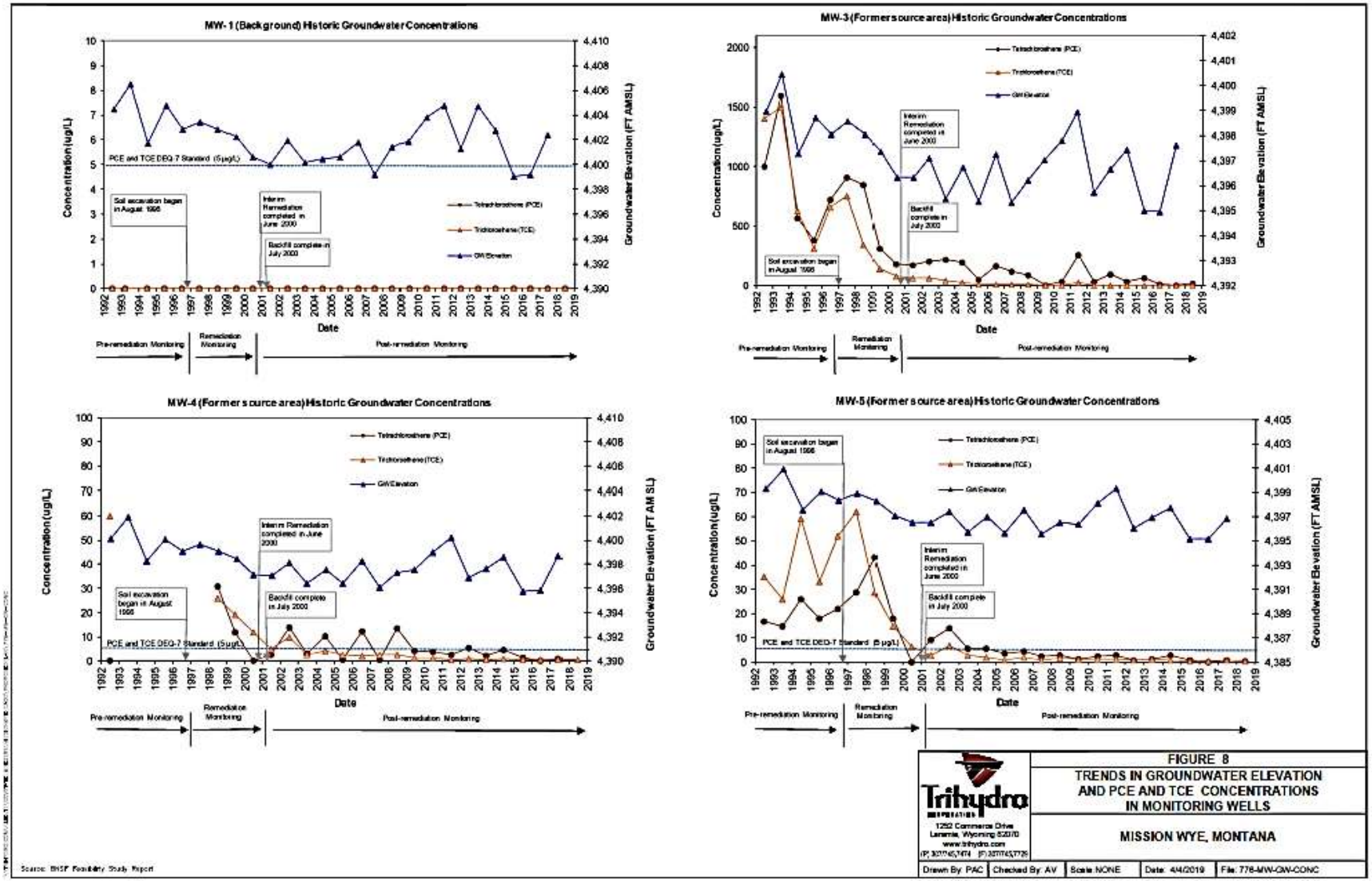


Figure 9. Results of groundwater monitoring at MW-9, MW-12, MW-18, MW-19.

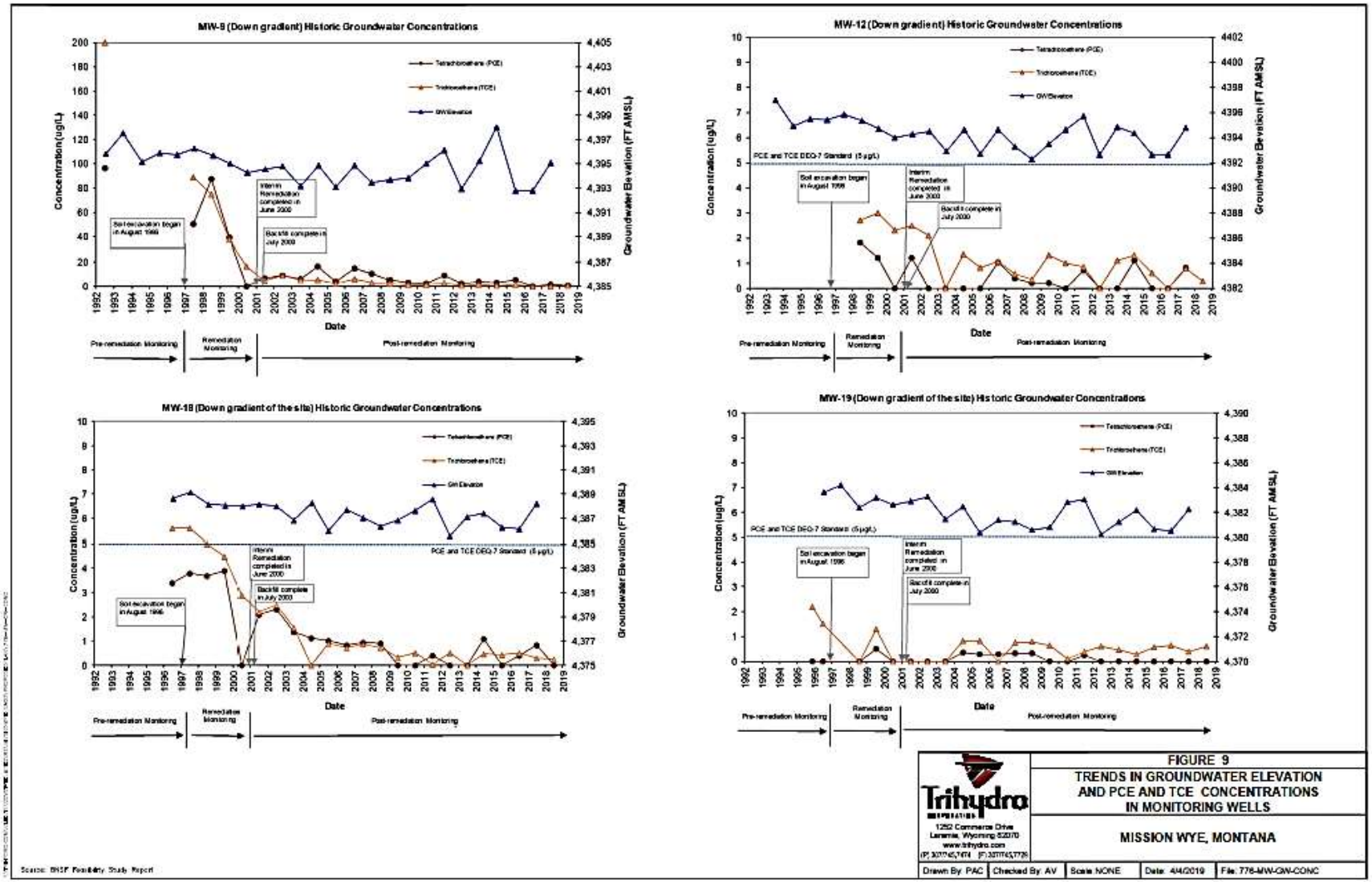
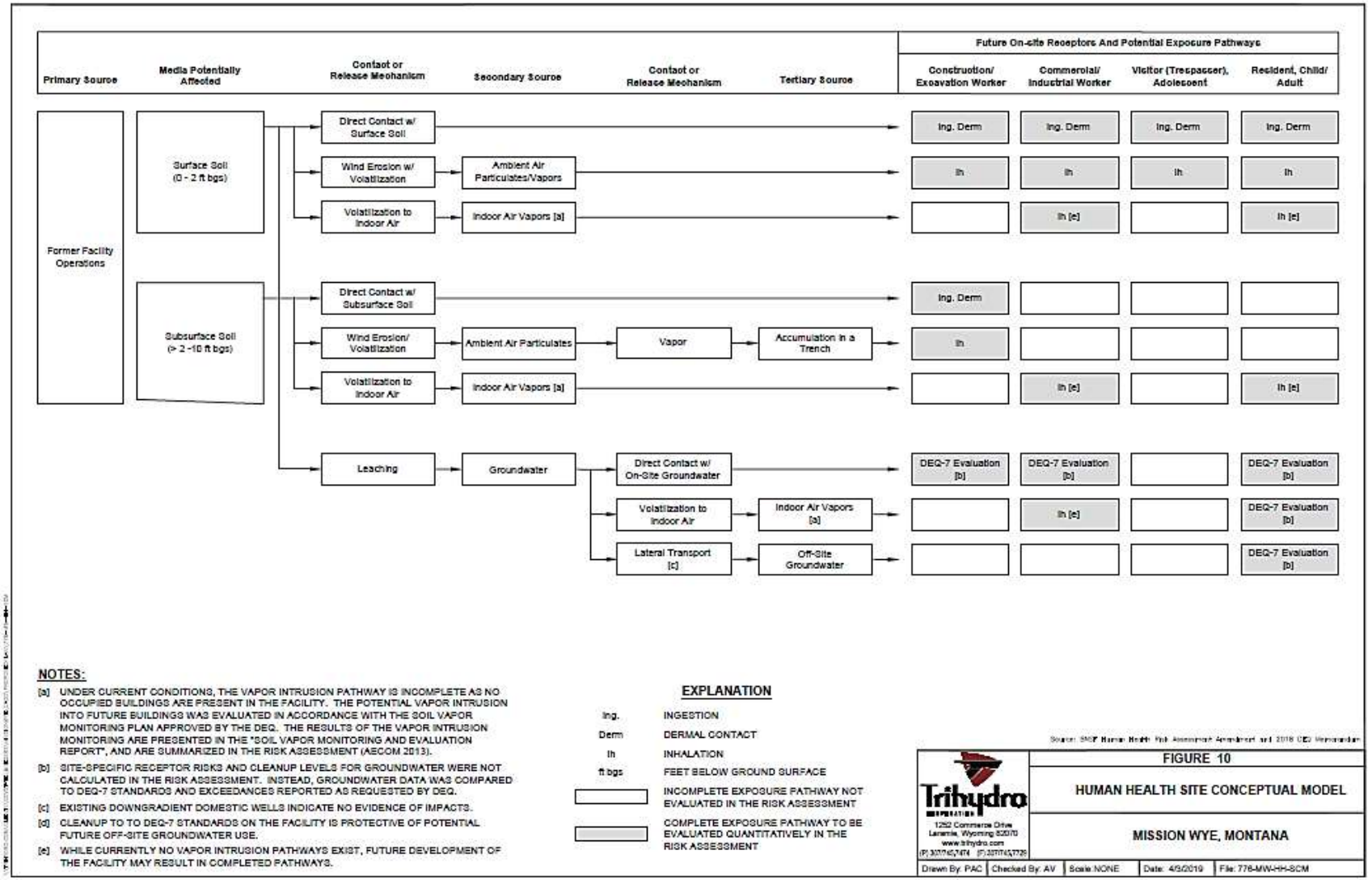


Figure 10. Human health site conceptual model.



Appendix A

Table F-1 Scope of Remedial Alternative and Assumptions used for Cost Estimates
BNSF Mission Wye, Livingston, Montana

Technologies	Assumed Timeframe (years)	Total Capital Cost	Total O&M Cost	Total Cost	Net Present Value (NPV)* Cost	Notes
No Action	0-30	$ -	$ -	$ -	$ -	Baseline case
Soil Tilling	1	$ 9,300	$ 27,600	$ 36,900	$ 36,100	Soil tilling with use of a mini-excavator with articulated bucket or disc to turn over soils to an approximate depth of two feet bgs. Assume two 10 ft x 10 ft tilling areas.
Soil Vapor Extraction (SVE)	2	$ 20,300	$ 153,400	$ 173,700	$ 167,100	Preparation of Remedial Action Work Plan/Design. Restart of SVE system. Assume 8 existing SVE wells and 3 VMPs, 10 HP regenerative blower, GAC SVE vapor treatment. Operation full-time with semi-annual vapor sampling and annual groundwater monitoring for two years followed by two years of post-remediation groundwater monitoring.
Monitored Natural Attenuation (MNA)	0-4	$ 13,200	$ 140,000	$ 153,200	$ 143,300	Preparation of Work Plan. Annual groundwater monitoring includes VOC analysis at 14 sample locations and collection of 4 QA/QC samples and measurement of groundwater depth at 23 locations. Assumes MNA parameters analyzed at 6 of the sampling locations.
Institutional Controls (ICs)	0-30	$ 12,500	$ 78,000	$ 90,500	$ 63,500	Assumes deed restriction of property and annual inspections to ensure compliance and a review of the title records (once every 5 years) to ensure compliance.

Notes:

* = 3% discount factor used for NPV calculation used for remedies with time frames greater than one year.

All Technologies assume two years of post-remediation confirmation groundwater sampling (8 wells) and groundwater levels (23 wells) at $45,600.

The 2-year post remediation groundwater monitoring period is not included in the Assumed Timeframes.

bgs - below ground surface

ft - feet

GAC - granular activated carbon

HP - horsepower

BNSF Mission Wye FS Rev 2
Cost Estimate Backup

Site	BNSF Mission Wye
Location	Livingston, MT
Phase	Feasibility Study REV 2
Task	Tilling Cost Estimate Backup
Revision Date	June 19, 2018
Base Year	2019

Soil Tilling

Tilling - Capital Cost	$ 9,300
Tilling - Annual O&M Cost	$ 27,600

Key Assumptions
Prepare Remedial Action Work Plan. Periodic soil tilling (monthly for 8 months) and soil monitoring at four locations plus 1 QA/QC sample for VOCs. Remedial Activities Completion Report.

Work Description	Quantity	Units	Unit Costs	Total
Remedial Action Work Plan				
RA Work Plan	1	LS	$ 4,250	$ 4,250
MDEQ Oversight	1	LS	$ 5,000	$ 5,000
TOTAL CAPITAL COSTS				**$ 9,250**
Annual Operation of Tilling				
O&M	1	Each	$ 11,120	$ 11,120
Soil Sampling	1	Each	$ 5,000	$ 5,000
Analytical Laboratory	1	Each	$ 300	$ 300
Remedial Activities Completion Report	1	Each	$ 3,150	$ 3,150
MDEQ Oversight	1	Each	$ 8,000	$ 8,000
TOTAL ANNUAL O&M COSTS				**$ 27,570**

Net Present Value Analysis:

Estimated Duration of Remedial Alternative (years)	1
Discount Factor (MDEQ Requested)	3%

Year	Cost Type	Total Cost Per Year	Total Cost	Present Value
0	Capital Cost	$9,300	$9,300	$9,300
1	Annual O&M Cost	$27,600		$26,796

Total Capital Cost:	**$9,300**	**Total Net Present Value**	**$36,100**
Total O&M Cost:	**$27,600**		

BNSF Mission Wye FS Rev 2

Cost Estimate Backup

	BNSF Mission
Site	Wye
Location	Livingston, MT
Phase	Feasibility Study REV 2
	Soil Vapor Extraction Cost Estimate
Task	Backup
Base Year	2019

Soil Vapor Extraction (SVE)

	$
SVE - Capital Cost	20,300
	$
SVE - Annual O&M Cost	76,700
	$
SVE - 2 Years O&M Cost	153,400

Key Assumptions

Remedial Action Work Plan, Annual Report/Remedial Activities Completion Report, operation of SVE system. No additional expansion/capital costs from the pilot SVE system already installed. O&M activities include bi-weekly O&M inspections/drive-bys to confirm operation and annual groundwater monitoring of eight wells. Semi-annual soil gas monitoring of treatment effluent.

Work Description	Quantity	Units	Unit Cost	Total
Remedial Action Work Plan				
RA Work Plan	1	LS	$ 10,250	$ 10,250
MDEQ Oversight	1	LS	$ 5,000	$ 5,000
SVE System Restart	1	LS	$ 5,000	$ 5,000
TOTAL CAPITAL COSTS				**$ 20,250**
Annual Operation of SVE				
O&M	1	Each	$ 42,000	$ 42,000
Annual GW Sampling	1	Each	$ 12,000	$ 12,000
Analytical Laboratory (GW)	1	Each	$ 600	$ 600
Analytical Laboratory (Vapor)	1	Each	$ 1,900	$ 1,900
Annual Report / Remedial Activities Completion Report	1	Each	$ 12,150	$ 12,150
MDEQ Oversight	1	Each	$ 8,000	$ 8,000
TOTAL ANNUAL O&M COSTS				**$ 76,650**

Net Present Value Analysis:

Estimated Duration of Remedial Alternative (years)	2
Discount Factor (MDEQ Requested)	3%

Year	Cost Type	Total Cost Per Year	Total Cost	Present Value
0	Capital Cost	$20,300	$20,300	$20,300
1	Annual O&M Cost	$76,700		$74,466
2	Annual O&M Cost	$76,700		$72,297

Total Capital Cost:	**$20,300**		
Total O&M Cost:	**$153,400**	**Total Net Present Value**	**$167,100**

BNSF Mission Wye FS Rev 2
Cost Estimate Backup

Site	BNSF Mission Wye
Location	Livingston, MT
Phase	Feasibility Study REV 2
Task	Soil Vapor Extraction Cost Estimate Backup
Base Year	2019

GW Remedial Option - MNA with Annual GW Monitoring

MNA - Capital Cost	$ 13,200	Work Plan Prep
MNA - Annual O&M Cost	$ 35,000	Sample & Report
MNA - 4 years O&M Cost	$ 140,000	Sample & Report

Key Assumptions

Remedial Action Work Plan. Annual MNA groundwater monitoring at the site. Annual groundwater monitoring includes VOC analysis at 14 sample locations and collection of 3 QA/QC samples and measurement of groundwater depth at 23 locations. MNA parameters analyzed at 6 of the sampling locations. Annual Report.

Work Description	Quantity	Units	Unit Cost	Total
Remedial Action Work Plan				
RA Work Plan	1	LS	$ 9,150	$ 9,150
MDEQ Oversight	1	LS	$ 4,000	$ 4,000
TOTAL CAPITAL COSTS				**$ 13,150**
Annual Groundwater Monitoring and Reporting				
Annual GW Sampling	1	Each	$ 15,500	$ 15,500
Analytical Laboratory	1	Each	$ 3,390	$ 3,390
Annual Report	1	Each	$ 12,150	$ 12,150
MDEQ Oversight	1	Each	$ 4,000	$ 4,000
TOTAL ANNUAL O&M COSTS				**$ 35,040**

Net Present Value Analysis:

Estimated Duration of Remedial Alternative (years)	4
Discount Factor (MDEQ Requested)	3%

Year	Cost Type	Total Cost Per Year	Total Cost	Present Value
0	Capital Cost	$13,200	$13,200	$13,200
1	Periodic Monitoring Cost	$35,000		$33,981
2	Periodic Monitoring Cost	$35,000		$32,991
3	Periodic Monitoring Cost	$35,000		$32,030
4	Periodic Monitoring Cost	$35,000		$31,097

Total Capital Cost: **$13,200**
Total O&M Cost: **$140,000**

Total Net Present Value **$143,300**

BNSF Mission Wye FS Rev 2
Cost Estimate Backup

	BNSF Mission
Site	Wye
Location	Livingston, MT
Phase	Feasibility Study REV 2
Task	Institutional Controls Cost Estimate Backup
Base Year	2019

Institutional Controls

IC - Capital Cost	$ 12,500
IC - Annual O&M Cost	$ 2,600
IC - 30 years O&M cost	$ 78,000

Description

Institutional controls will place deed restriction on railroad owned property; BNSF will work directly with MRL for agreements. Survey will be completed by MT licensed PLS. O&M costs include inspection program for annual inspections and every 5 years deed review with brief letter report summary for each.

Work Description	Quantity	Units	Unit Cost	Total
Deed Restriction				
Deed Restriction	1	LS	$ 12,500	$ 12,500
MDEQ Oversight	1	LS	$ 4,000	$ 4,000
TOTAL CAPITAL COSTS				**$ 12,500**
Inspection Program				
Annual Inspection Program	1	Each	$ 1,350	$ 1,350
5-yr Deed Restriction Review	1	Each	$ 270	$ 270
MDEQ Oversight	1	Each	$ 1,000	$ 1,000
TOTAL ANNUAL O&M COSTS				**$ 2,620**

Net Present Value Analysis:

Estimated Duration of Remedial Alternative (years)	30
Discount Factor (MDEQ Requested)	3%

Year	Cost Type	Total Cost Per Year	Total Cost	Present Value
0	Capital Cost	$12,500	$12,500	$12,500
1	Annual O&M Cost	$2,600		$2,524
2	Annual O&M Cost	$2,600		$2,451
3	Annual O&M Cost	$2,600		$2,379
4	Annual O&M Cost	$2,600		$2,310

5	Annual O&M Cost	$2,600	$2,243
6	Annual O&M Cost	$2,600	$2,177
7	Annual O&M Cost	$2,600	$2,114
8	Annual O&M Cost	$2,600	$2,052
9	Annual O&M Cost	$2,600	$1,993
10	Annual O&M Cost	$2,600	$1,935
11	Annual O&M Cost	$2,600	$1,878
12	Annual O&M Cost	$2,600	$1,824
13	Annual O&M Cost	$2,600	$1,770
14	Annual O&M Cost	$2,600	$1,719
15	Annual O&M Cost	$2,600	$1,669
16	Annual O&M Cost	$2,600	$1,620
17	Annual O&M Cost	$2,600	$1,573
18	Annual O&M Cost	$2,600	$1,527
19	Annual O&M Cost	$2,600	$1,483
20	Annual O&M Cost	$2,600	$1,440
21	Annual O&M Cost	$2,600	$1,398
22	Annual O&M Cost	$2,600	$1,357
23	Annual O&M Cost	$2,600	$1,317
24	Annual O&M Cost	$2,600	$1,279
25	Annual O&M Cost	$2,600	$1,242
26	Annual O&M Cost	$2,600	$1,206
27	Annual O&M Cost	$2,600	$1,170
28	Annual O&M Cost	$2,600	$1,136
29	Annual O&M Cost	$2,600	$1,103
30	Annual O&M Cost	$2,600	$1,071
	Total Capital Cost:	**$12,500**	**Total Net Present Value** **$63,500**
	Total O&M Cost:	**$78,000**	

BNSF Mission Wye FS Rev 2
Cost Estimate Backup

	BNSF Mission
Site	Wye
Location	Livingston, MT
Phase	Feasibility Study REV 2
Task	Post-Remediation Groundwater Monitoring Cost Estimate Backup

Post-Remediation Groundwater Monitoring		
Post-Remediation GW Monitoring - Annual Cost	$	22,800
Two years of Monitoring	$	45,600

Key Assumptions

Annual groundwater monitoring at the site for a period of 2 years for closure monitoring. Assumes groundwater monitoring includes VOC analysis at 8 sample locations and collection of 2 QA/QC samples and measurement of groundwater depth at 23 locations. Annual reporting.

Work Description	Quantity	Units	Unit Cost	Total
Annual Groundwater Monitoring and Reporting				
Annual GW Sampling	1	Each	$ 12,000	$ 12,000
Pace Analytical	1	Each	$ 600	$ 600
Annual Report	1	Each	$ 6,150	$ 6,150
MDEQ Oversight	1	Each	$ 4,000	$ 4,000
TOTAL ANNUAL COSTS				**$ 22,750**

Appendix B

After recording, please return to:

[insert BNSF or MRL and the entity address]

DECLARATION OF RESTRICTIVE COVENANTS ON REAL PROPERTY

THIS DECLARATION OF RESTRICTIVE COVENANTS ON REAL PROPERTY (Restrictive Covenants) is made by [insert owner's name] as of [insert date].

RECITALS

WHEREAS, [insert owner's name] is the owner of certain real property (the Subject Property) located in Park County, Montana, shown on Attachment 1 and more particularly described as:

[insert property description]

WHEREAS, the Subject Property is located within the Mission Wye Facility (Facility);

WHEREAS, the Montana Department of Environmental Quality (DEQ) has determined that releases or threatened releases of hazardous or deleterious substances that may pose an imminent and substantial endangerment to public health, safety, or welfare or the environment have come to be located upon the Subject Property;

WHEREAS, DEQ, under the authority of the Montana Comprehensive Environmental Cleanup and Responsibility Act, §§ 75-10-701 et seq., MCA, has issued a Record of Decision dated [insert date] for the Facility and selected a remedy to abate the imminent and substantial endangerment posed by the hazardous or deleterious substances;

WHEREAS, the site-specific cleanup levels selected as part of the final remedy were based upon the Subject Property being used, now and in the future, for commercial/industrial purposes and are not protective of residential use;

WHEREAS, within the Subject Property, there are areas where groundwater exceeds Montana water quality standards and the site-specific cleanup levels selected in the remedy;

WHEREAS, within the Subject Property, there are areas with identified soil vapor contamination that has the potential to impact indoor air if a structure were constructed in those areas; within those areas, there is also the potential for contaminated soil gas to accumulate in an excavation or trench;

WHEREAS, the selected remedy requires that use of the Subject Property be restricted in order to mitigate the risk to the public health, safety or welfare or the environment and [insert property owner's name] is willing to comply with, enforce, and record such restrictions as provided for in § 75-10-727, MCA;

NOW, THEREFORE, [insert owner's name] hereby agrees and declares:

1. Within the Subject Property, no wells may be drilled without the express advance written approval of DEQ. Groundwater within the Subject Property may not be used for any purpose other than sampling without the express prior written approval of DEQ. The integrity of any monitoring wells must be maintained by the owner of the Subject Property and may not remove any seals on any closed wells.

2. Within the Subject Property, no irrigation of any kind may occur.

3. Within the Subject Property, no construction of any type of building may occur, and no soil may be disturbed in any manner, including without limitation drilling, trenching, or excavation, without the express advance written approval of DEQ. It is the [insert owner's name] intent that this limitation be construed as broadly as possible to prohibit any type of construction, including structures, containments, footings, or similar below ground appurtenances, as well as drilling, trenching, or excavation of any kind whatsoever, unless DEQ's express advance written approval is obtained. As part of providing its approval, DEQ may require a ventilation system for any excavation or trench excavation activities in those areas with identified soil vapor contamination in order to limit the risk of human exposure to contaminated soil vapor.

4. Within the Subject Property, no residential development or use, including but not limited to permanent residential use; temporary residential use; limited residential use; short-term residential use; children's day care; mobile homes with or without footings; mobile home with or without a pad; or camping shall occur. It is the [insert owner's name] intent that this limitation be construed as broadly as possible to prohibit any type of residential use whatsoever any place upon the Subject Property.

5. No action shall be taken, allowed, suffered, or omitted on the Subject Property if such action or omission is reasonably likely to create a risk of migration of hazardous or deleterious substances or a potential hazard to public health, safety, or welfare or the environment or result in a disturbance of the structural integrity of any engineering controls designed or utilized at the Facility to contain hazardous or deleterious substances or limit human or environmental exposure to the hazardous or deleterious substances.

6. [Insert owner's name] agrees to provide DEQ and its representatives and contractors, and all representatives and contractors of any person conducting DEQ-approved remedial actions on the Subject Property, access at all reasonable times to the Subject Property.

7. At all times after [insert owner's name] conveys any portion or all of its interest in the Subject Property and no matter what person or entity is in title to or in possession of any portion or all of the Subject Property, [insert owner's name] agrees that it and its agents shall retain the right to enter the Subject Property at reasonable intervals and at reasonable times of the day in order to inspect for violations of the Restrictive Covenants contained herein. In addition, [insert property owner's name] retains the rights and obligation to enforce these Restrictive Covenants even after it conveys all or any portion of its interest in the Subject Property.

8. DEQ shall also be entitled to enforce these Restrictive Covenants as an intended beneficiary thereof. [Insert owner's name] specifically agrees that the remedy of "specific performance" of these Restrictive Covenants shall be available to DEQ in such proceedings. Venue for enforcement of these Restrictive Covenants by DEQ shall be in the state First Judicial District Court, Montana.

9. The provisions of these Restrictive Covenants of the Subject Property shall run with the land and bind all holders, owners, lessees, occupiers, and purchasers of the Subject Property. These restrictive covenants apply in perpetuity and every subsequent instrument conveying an interest in all or any portion of the Subject Property shall include these Restrictive Covenants. [Insert owner's name] will notify DEQ of any proposed conveyance of all or any portion of the Subject Property at least 30 days prior to any such conveyance. [Insert owner's name] and all future owners will provide notice to all potential purchasers by providing a copy of these Restrictive Covenants prior to the conveyance of all or any portion of the Subject Property and shall provide a copy of this notice to DEQ.

10. [Insert owner's name] and all future owners shall cause the requirements of these Restrictive Covenants to be placed in all instruments that convey an interest in all or any

portion of the Subject Property and shall file this document with the county clerk and recorder in Park County, Montana.

11. The rights provided to DEQ in this declaration include any successor agencies of DEQ.

IN WITNESS WHEREOF, [insert owner's name] has executed this Declaration of Restrictive Covenants on Real Property as of the first date written above.

[INSERT OWNER'S NAME]

_____

By:

State of Montana)

:ss.

County of [insert county name])

On this __ day of _____, 20__, personally appeared _____, before me, a Notary Public for the State of Montana, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year hereinabove first written.

_____

NOTARY PUBLIC FOR THE STATE OF MONTANA

(SEAL)

Residing at _____

My Commission Expires: _____